

REMARKS

The Office Action dated November 2, 2004 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

In accordance with the foregoing, no new matter is being presented, and approval and entry are respectfully requested.

Claims 1-4 stand allowed and claims 5-12 are rejected. Claims 1-12 are pending and under consideration.

CHANGES TO THE SPECIFICATION:

Changes have been made to the specification only to place it in preferred and better U. S. form for issuance. No new matter has been added as there is support for the changes in portions of the specification and drawings as originally filed.

INFORMATION DISCLOSURE STATEMENT:

On September 9, 2001 an Information Disclosure Statement was filed at the United States Patent and Trademark Office. However, upon review of the pending Office Action, Applicants noticed that the initialed PTO-1449 form including a list of references associated with the IDS filed was not submitted with the pending Office Action. Accordingly, Applicants hereby respectfully request that the references submitted in the IDS filed on September 9, 2001 be considered and that the PTO-1449 be signed and provided to the Applicants.

REJECTION UNDER 35 U.S.C. § 102:

In the Office Action, at page 2, claims 5-7 and 9-11 are rejected under 35 U.S.C. § 102 as anticipated by U. S. Patent No. 6,788,680 to Perlman et al. ("Perlman"). The Office Action takes the position that Perlman describes all the recitations of independent claims 5 and 9 and related dependent claims. This rejection is traversed and reconsideration is requested.

Independent claim 5, upon which claims 6-8 are dependent, recites a method of switching data in a network switch. The method includes receiving an incoming data packet at a first port of a switch, reading a first packet portion, less than a full packet length, to determine particular packet information, said particular packet information including a source address and a destination address, obtaining an egress port or egress ports based on said particular packet information, and sending the incoming data packet to the egress port or egress ports. The incoming data packet has a flexible length header, the first packet portion is read from the flexible length header and the particular packet information is read by shifting the information field positions to account for the flexible length of the flexible length header.

Independent claim 9, upon which claims 10-12 are dependent, recites a network switch including means for receiving an incoming data packet at a first port of the switch, means for reading a first packet portion, less than a full packet length, and to determine particular packet information, said particular packet information including a source address and a destination address. The switch also includes means for obtaining an egress port or egress ports based on said particular packet information, and means for sending the incoming data packet to the egress port or egress ports. The incoming data packet has a flexible length header, the first packet portion is read by the means for reading from the flexible length header and the particular packet information is read by the means for reading by shifting the information field positions to account for the flexible length of the flexible length header.

As will be discussed below, the cited prior art of Perlman fails to disclose or suggest the elements of any of the presently pending claims.

Perlman generally describes a packet header 18 including a fixed portion 20 and a variable length options portion 26. See column 3, lines 50-67. The fixed portion 20 includes a destination address 22 and a source address 24. The options portion 26 includes some number n of optional fields OPT126a, OPT226b, . . . OPTn 26n. The options portion is used to indicate specific kinds of optional processing to be performed by a device receiving a packet including packet header 18. Further, FIG. 3 of Perlman shows an illustrative format of optional fields in the options portion 26 of the packet header 18.

Contrary to the contentions made in the Office Action, Perlman fails to teach or suggest all the recitations of independent claims 5 and 9. For instance, Perlman is silent as to teaching or suggesting, “the particular packet information is read by shifting the information field positions to account for the flexible length of the flexible length header,” as recited in independent claim 5. Perlman does not broach the concept of shifting optional field positions to account for a flexible length of the options portion 26 of the packet header 18. Rather, Perlman limits its description to providing that each option falls within at least one of three categories, specifically 1) those options requiring the receiver to drop the received packet, 2) those options requiring the receiver to simply skip this option if it is not supported, and 3) those options indicating that processing required by this option may be deferred. None of the categories for the options provides that information is read by shifting the options to account for a flexible length of the packet header 18.

Further, Perlman generally describes that a length field 32 contains a value indicating the length of the option field 28, while the value field 34 contains a value or other data used during processing of the option field 28. See column 4, lines 1-3. However, Perlman does not provide that information is read by shifting the positions of the option field 28 to account for the length of the packet header 18. Perlman fails to

teach or suggest, “the first packet portion is read from the flexible length header and the particular packet information is read by shifting the information field positions to account for the flexible length of the flexible length header,” as recited in independent claim 5.

For similar reasons as provided above, Perlman fails to teach or suggest, “the particular packet information is read by the means for reading by shifting the information field positions to account for the flexible length of the flexible length header,” as recited in independent claim 9.

Accordingly, it is respectfully asserted that Perlman fails to teach or suggest all the recitations of independent claims 5 and 9 and related dependent claims. It is respectfully requested that independent claims 5 and 9 and related dependent claims be allowed.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at pages 7 and 12, dependent claims 8 and 12 are rejected under 35 U.S.C. § 103 as being unpatentable over Perlman and U. S. Patent No. 6,574,194 to Sun et al. (“Sun”). The Office Action takes the position that Perlman discloses all the aspects of dependent claims 8 and 12. The rejection is traversed and reconsideration is requested.

Dependent claims 8 and 12 depend from independent claims 5 and 9, respectively. Because the combination of Perlman and Sun must teach, individually or combined, all the recitations of the base claim and any intervening claims of dependent claims 8 and 12, the arguments presented above supporting the patentability of independent claims 5 and 9 over Perlman are incorporated herein.

Referring to Sun, this reference generally describes a system facilitating packet flow among stations on a data network. Further, in FIG. 5A, Sun provides a circuitry 500 that is interfaced with LED interface 114 of FIG. 1. See column 10, lines 9-25. Four shift circuits 502, 504, 506, and 508 are provided for a switch system to convey status information of switch system 100 to a user using a minimum number of inputs to LEDs is

one of the features in the present invention. The circuitry is often referred to as a display interface in the art and more particularly referred to as an LED interface when the status information is to be displayed on LEDs.

However, similar to Perlman, Sun fails to teach or suggest, “a method of switching data in a network switch... wherein...the particular packet information is read by shifting the information field positions to account for the flexible length of the flexible length header,” as recited in independent claim 5. The shifting circuitry is not provided to read particular packet information by shifting information field positions to account for the flexible length of a length header. Rather, the shifting in Sun is provided to facilitate displaying status of information.

Accordingly, it is respectfully asserted that even if Perlman and Sun are combined, as suggested in the Office Action, the combination thereof would not provide for all the recitations of independent claim 5. For similar reasons as provided above, Perlman and Sun fail to teach or suggest, “the particular packet information is read by the means for reading by shifting the information field positions to account for the flexible length of the flexible length header,” as recited in independent claim 9.

Accordingly, it is respectfully asserted that Perlman fails to teach or suggest all the recitations of independent claims 5 and 9 and related dependent claims. It is respectfully requested that independent claims 5 and 9 and related dependent claims be allowed.

CONCLUSION:


In view of the above, applicant respectfully submits that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicant further submits that the subject matter is more than sufficient to render the claimed invention unobvious to a person of skill in the art. Applicant therefore respectfully requests that each of claims 5-12 be found allowable, in addition to the allowed claims 1-4, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


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